

IN THE CLAIMS:

1. (Currently Amended) A connector structure of a permanent magnet DC motor, the motor having brushes and a metal motor housing, the connector structure comprising:
 - a connector body disposed outside of the metal motor housing,
 - lead structure leads housed by the connector body, the lead structure having leads and being constructed and arranged to be connected to a source of power to power the motor, the lead structure having ends, and leg portions connecting the leads to the ends,
 - a printed circuit board mounted ~~with respect to~~ within a portion of the connector body and carrying at least one electro-magnetic interference (EMI) suppression component constructed and arranged to suppress EMI generated by the motor, the ends of the lead structure leads being electrically connected with soldered to the printed circuit board so that current can be provided through the printed circuit board to the brushes, with the legs portions being generally parallel with the printed circuit board, and
 - a contact member electrically connected between the printed circuit board and the metal motor housing so that the at least one EMI suppression component couples the brushes of the motor to the metal motor housing thereby causing the metal motor housing to become an AC ground and EMI shield.
2. (Original) The connector structure of claim 1, wherein the at least one EMI suppression component is a surface mounted device.
3. (Original) The connector structure of claim 1, wherein the at least one EMI suppression component includes a capacitor.
4. Canceled

5. (Currently Amended) The connector structure of claim 1, further including a cover structure being over-molded over to cover an entire surface of the printed circuit board.
6. (Original) The connector structure of claim 5, wherein the connector body includes a recess, the circuit board being mounted to the connector body within the recess.
7. (Currently Amended) The connector structure of claim 6, wherein the cover structure is constructed and arranged to fill the recess and cover the entire printed circuit board.
8. (Currently Amended) The connector structure of claim 1, wherein the leads extend generally transversely with respect to the leg portions ~~printed circuit board~~.
9. (Currently Amended) A permanent magnet DC motor having electro-magnetic interference (EMI) suppression, the motor including:
 - a metal motor housing; and
 - a brush card assembly comprising:
 - brushes,
 - lead structure having leads constructed and arranged to be coupled with a source of power to power the motor, the lead structure having ends, and leg portions connecting the leads to the ends,
 - a housing having a first portion housing the brushes and being operatively associated with the metal motor housing, and a second portion integral with the first portion and housing the leads,
 - a printed circuit board mounted with respect to the second portion of the housing and carrying at least one electro-magnetic interference (EMI) suppression component constructed and arranged to suppress EMI generated by the motor, the ends of the lead structure ~~leads being electrically connected~~

soldered to the printed circuit board so that current can be provided through the printed circuit board to the brushes, with the legs portions being generally parallel with the printed circuit board, and

a contact member electrically connected between the printed circuit board and the metal motor housing so that the at least one EMI suppression component couples the brushes to the metal motor housing thereby causing the metal motor housing to become an AC ground and EMI shield.

10. (Original) The motor of claim 9, wherein the at least one EMI suppression component is a surface mounted device.
11. (Original) The motor of claim 9, wherein the at least one EMI suppression component includes a capacitor.
12. Canceled
13. (Original) The motor of claim 9, wherein the second portion of the housing includes a recess, the circuit board being mounted within the recess.
14. (Currently Amended) The motor of claim 13, further including a cover structure, the cover structure being over-molded ~~constructed and arranged~~ to fill the recess and cover an entire surface of the printed circuit board.
15. (Currently Amended) The motor of claim 9, wherein at least a portion of each lead extends generally transversely with respect to the leg portions ~~printed circuit board~~.
16. (Original) The motor of claim 9, wherein the metal motor housing includes an open end and the first portion of the housing is disposed within the open end in such a manner that at least a portion of the contact member contacts an interior surface of the metal motor housing.

17. Canceled

18. (New) A connector structure of a permanent magnet DC motor, the motor having brushes and a metal motor housing, the connector structure comprising:

a connector body disposed outside of the metal motor housing,

leads, housed by the connector body, constructed and arranged to be connected to a source of power to power the motor,

a printed circuit board mounted within a portion of the connector body and carrying at least one electro-magnetic interference (EMI) suppression component constructed and arranged to suppress EMI generated by the motor, the ends of the leads being electrically connected with soldered to the printed circuit board so that current can be provided through the printed circuit board to the brushes, with the legs portions being generally parallel with the printed circuit board,

a contact member electrically connected between the printed circuit board and the metal motor housing so that the at least one EMI suppression component couples the brushes of the motor to the metal motor housing thereby causing the metal motor housing to become an AC ground and EMI shield, and

a cover structure over-molded to cover an entire surface of the printed circuit board.